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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,027	07/29/2003	Martin Kreuzer	TRW(ASG)6674	7775

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EXAMINER

ROSENBERG, LAURA B

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/630,027	Applicant(s) KREUZER, MARTIN	
	Examiner Laura B. Rosenberg	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed 06 June 2005, in which claims 1 and 6 were amended, claim 2 was canceled, and claims 7-13 were added.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Okada (3,758,133). Okada discloses a gas bag protection device (best seen in figures 5, 6) comprising:

- Gas bag (#3) having outer wall made of first material (bag material not specified, but most gas bags are made of some type of fabric)
- Outflow opening (portion of #3 covered by #8) in outer wall
- Membrane (#8) made of an extensible, second material (film) fastened to outer wall and covering the outflow opening when gas bag is not fully inflated (figure 5)
- First material and membrane defining an inflatable volume of the gas bag (best seen in figures 5, 6) that varies depending upon the load applied to the gas bag (for example, inflatable volume changes when a large load is applied and the membrane is cut)

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- Device (#9) outside gas bag that serves to destroy membrane (shown destroying membrane in figure 6)
- Gas bag and device spaced far enough apart that membrane meets device only when a predetermined internal pressure of the gas bag has been reached (figure 6)
- Membrane in a folded gas bag state arranged inside the gas bag (figure 5) and turned outwards through the outlet opening on inflation of the gas bag (figure 6)
- Outflow opening is covered only by the membrane (best seen in figure 5)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-8, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada (3,758,133) in view of Braunschadel (6,056,318). Okada discloses a gas bag protection device (best seen in figures 5, 6) comprising:

- Gas bag (#3) having outer wall made of first material (bag material not specified, but most gas bags are made of some type of fabric)
- Outflow opening (portion of #3 covered by #8) in outer wall
- Membrane (#8) made of an extensible, second material (film) fastened to outer wall and covering the outflow opening when gas bag is not fully inflated (figure 5)

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- Device (#9) outside gas bag that serves to destroy membrane (shown destroying membrane in figure 6)
- Gas bag and device spaced far enough apart that membrane meets device only when a predetermined internal pressure of the gas bag has been reached (figure 6)
- Membrane in a folded gas bag state arranged inside the gas bag (figure 5) and turned outwards through the outlet opening on inflation of the gas bag (figure 6)
- In a destroyed state, membrane defines an effective outflow cross-section (best seen in figure 6)
- Device (#9) provided on an "inner face" of a steering wheel (steering wheel not labeled, but is positioned in front of driver as seen in figures 1, 2)
- Outflow opening is covered only by the membrane (best seen in figure 5)

Okada does not disclose the membrane bulging toward an exterior before reaching the device, the membrane in the destroyed state providing for either an enlargement or reduction of the effective outflow cross-section as a function of an internal pressure in the gas bag, inflatable volume defined by the first material and the membrane increasing when the membrane bulges forward toward the exterior, or the membrane being made of an elastic material.

Braunschadel teaches a gas bag protection device (figures 1-3) comprising:

- Gas bag (#1) having outer wall made of first material (bag material not specified, but most gas bags are made of some type of fabric)
- Outflow opening (#2) in outer wall (best seen in figure 1)

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- Membrane (including #4) made of an extensible, second material (elastic fabric) fastened to outer wall and covering outflow opening when gas bag is not fully inflated (shown in exploded view in figure 1)
- Membrane in a folded gas bag state arranged inside the gas bag and turned outwards through the outlet opening on inflation of the gas bag, bulging forward toward an exterior like a balloon (column 2, lines 42-48)
- In a “destroyed” state, membrane defines an effective outflow cross-section and provides for an adjustment in size of the outflow cross-section as a function of an internal pressure of the gas bag (column 2, lines 42-61)
- First material and membrane defining an inflatable volume of the gas bag that increases when the membrane bulges forward toward the exterior (due to the membrane’s elasticity)

It would have been obvious to one skilled in the art at the time that the invention was made to modify the gas bag protection device of Okada such that it comprised the membrane bulging toward an exterior before reaching the device, the membrane in the destroyed state providing for either an enlargement or reduction of the effective outflow cross-section as a function of an internal pressure in the gas bag, the inflatable volume defined by the first material and the membrane increasing when the membrane bulges forward toward the exterior, and the membrane being made of an elastic material as claimed in view of the teachings of Braunschadel so as to safely accommodate a variety of vehicle occupants who impart different loads when impacting the gas bag in a vehicle collision (Braunschadel: column 1, line 60-column 2, line 22).

Response to Arguments

6. Applicant's arguments filed 06 June 2005 have been fully considered but they are not persuasive.

In regards to pages 5-6 and claim 1, the Okada invention has been modified by the membrane and vent structure of the Braunschadel reference, not the other way around. Thus, the premise that modifying the Braunschadel invention with the Okada device is not of relevance. Since the Okada invention can be modified by the Braunschadel membrane and vent assembly, and the Braunschadel reference provides motivation for this modification, the prior art rejection is proper.

In regards to page 6 and claim 7, Braunschadel teaches an elastic membrane that bulges through the vent opening like a balloon when a load is applied to the inflating airbag. Thus, the volume of the gas bag would increase when the membrane bulges toward the exterior in the same manner as the applicant's claimed invention.

In regards to page 6 and claim 8, Braunschadel teaches a membrane made of an elastic material.

In regards to page 6 and claim 13, Okada discloses the outflow opening being covered only by the membrane, as can be seen in figure 5.

In regard to page 7 and claim 9, Okada discloses all of the features of this claim as set forth above.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B. Rosenberg whose telephone number is (571) 272-6674. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laura B Rosenberg
Patent Examiner
Art Unit 3616

LBR


DAVID R. DUNN
PRIMARY EXAMINER